

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001244**Date Inspected:** 23-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Office, Miscellaneous Metal, Lift 4E, Counter**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Office

Attend to project documentation and reports.

Miscellaneous Metal

Base metal surfaces of 650 +- splice plates and fill plates were abraded to an SSPC SP-10 condition and Interzinc 22 applied. Note: ZPMC personnel stacked aforementioned miscellaneous metal prior to thorough inspection making inspection unreasonable and unachievable, ZPMC transported items to paint shop and spread out for application to begin where a second follow up inspection was performed and non SP-10 plates were separated and then re-blasted. Profile amplitude was 76-80um.

Bikeway Bracket

BK001-008 was abrasive blasted and rejected due to improper blast, re-work required.

Lift 4E

ABF & ZPMC personnel performing dry film thickness (DFT) check on external surfaces.

Counterweights

Code numbers CW12, CW16 & CW18 underwent topcoat Interfine 979 repairs due to excessive dry film thickness and pinholes, re-application required.

Sample Panel

ABF fabricated 6 sample panels to ascertain gloss over metallic substrate as a comparator to final finished coating

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of Interfine 979 over bridge steel. Mist coat Interfine 979 was applied after testing was performed for cure and hardness. Subsequent Full coat was later applied today as well.

OBG 5CE

Adhesion testing was performed on the internal and external of applied Interzinc 22 coated surfaces and the following values observed. External: 1)7.59Mpa 2)7.85Mpa 3)7.03Mpa 4)6.17Mpa 5)5.18Mpa Internal: 1)8.89Mpa 2)7.51Mpa 3)11.74Mpa 4)8.77Mpa 5)9.67Mpa.

Miscellaneous Metal

Base metal surfaces of 22 pieces of channel iron were de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

Note: All inspections were performed jointly with ZPMC & ABF QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representatives were available for inspection and consultation.

Note: ABF Bill Oak and Don Walton with Caltrans QA Lumley observed ZPMC transporting ladder sections from blast shop to galvanizing facility without notification given to either Caltrans nor ABF of intended work processes.

Summary of Conversations:

Caltrans QA Lumley discussed galvanizing notification with ABF Bill Oak and Don Walton after viewing transport of ladder sections which are required to be galvanized. ZPMC presented no documentation for this work.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
